

THIRD AXIS INPUT DEVICE FOR MOUSE

ABSTRACT OF THE DISCLOSURE

5 A third input device used in a mouse is constructed to have a wheel
holder mounted on a bottom board inside the mouse, a roller, the roller having a
closed outer side, an inner side, and a receiving open chamber in the inner side,
an encoding wheel mounted inside the roller and pivoted with the roller to the
wheel holder, the encoding wheel having a mechanical tooth form, and a
10 locating plate coupled to the inner side of the roller for enabling the roller to be
pivoted with the encoding wheel to the wheel holder, the locating plate holding
a plurality of probes respectively disposed in contact with the tooth form of the
encoding wheel and adapted to output a signal indicative of direction and
amount of rotation of the encoding wheel and the roller.

15